



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,308	11/07/2001	Brig Barnum Elliott	BBNT-P01-144	2133
28120	7590	01/13/2006	EXAMINER	
FISH & NEAVE IP GROUP ROPES & GRAY LLP ONE INTERNATIONAL PLACE BOSTON, MA 02110-2624			GESESSE, TILAHUN	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/039,308	ELLIOTT ET AL.	
	Examiner	Art Unit	
	Tilahun B. Gesessse	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 27-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18, 20-25 and 27-29 is/are rejected.
- 7) ☐ Claim(s) 19 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/9/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed October 20, 2005 have been fully considered but they are not persuasive.

On page 11, third paragraph through page 13, fourth paragraph of response the office action, applicant argued that Passman, 759 does not teach determining whether the wireless terminal contains at least one functioning cluster transceiver.

The examiner respectfully disagrees with applicant's alleged argument to the teaching of Passman '759.

Passman teaches determining whether the wireless terminal contains at least one functioning cluster transceiver (the mobile communication station includes a memory and a processor. The memory has network information stored, the processor

1. operates the mobile station as a cluster head station .
2. resigns the mobile station as a cluster head station.
3. maintains affiliation with a cluster head neighbor at least during a period in which the mobile station resigns from operating as a cluster head and commences operating as a cluster member of the cluster head neighbor (column 3, lines 44-53 and figures 1-5).

Because of determining the functionality as a cluster transceiver, upon the mobile terminals movement and traffic of the communication, communicating as cluster head and cluster member.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically

pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's arguments filed October 20, 2005 have been fully considered but they are not persuasive.

On page 13, fourth and fifth paragraphs of response the office action , applicant allegedly argued that

independent claim 17 is directed to a wireless network. The wireless network comprises a plurality of first wireless terminals and at least one second wireless terminal. The first wireless terminals are configured to operate as cluster heads by communicating with at least one other cluster head over one or more backbone links. Each one of the plurality of first wireless terminals includes one or more backbone transceivers. **The** at least one second wireless terminal is configured to operate as a cluster member by communicating with an associated cluster head over one or more local links. Each one of the at least one second wireless terminals includes one or more cluster transceivers. At least one of the first or second wireless terminals includes both a backbone transceiver and a cluster transceiver.

The examiner respectively disagrees with applicant's alleged argument.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a plurality of first wireless terminals and at least one second wireless terminal.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the

specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's arguments filed October 20,2005 have been fully considered but they are not persuasive.

On page 15 , fourth and fifth paragraphs of response the office action , applicant allegedly argued that Passman does not teach a mobile station includes both a backbone transceiver and a cluster transceiver.

The examiner respectively disagrees to applicant's alleged argument that Passman does not teach a mobile station includes both a backbone transceiver and a cluster transceiver. Passman teaches a mobile station includes both a backbone transceiver and a cluster transceiver (column 1, lines 15-28).

Applicant's arguments filed October 20,2005 have been fully considered but they are not persuasive.

On page 16, fourth paragraph, in response to office action , applicant argued that attempt to disqualify as a prior art (passman) as to the rejection of claims 24-25 .

The examiner disagrees to applicant's alleged argument with respect to disqualify a prior art using 35 USC 103(c) .

Claims 24-25 depends on claim 17, Claim 17 has been rejected under 35 USC 102 (e). The 35 USC 103(c) is not applicable to disqualify a prior art to the rejection under 35 USC 102 (e).

Finally, in view of the teaching of the applied prior art and the examiner's response to applicant argument, Passman clearly anticipates applicant's broadly recited claims and rejection is proper and maintained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-18, 20-23 and 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Passman et al "Passman"(6,493,759).

Claims 1-3 10-11, 15 Passman discloses a method for integrating a wireless terminal into a wireless network,(see figure 4 and abstract) comprising:

Passman discloses determining whether the wireless terminal contains at least one functioning cluster transceiver (column 3, lines 43-53) attempting to affiliate the wireless terminal with a cluster head as a cluster member if the wireless terminal contains said at least one functioning cluster transceiver (column 3, lines 43-53 and figures 4-5) and operating the wireless terminal as a

cluster head if the wireless terminal does not contain said at least one functioning cluster transceiver (column 3, lines 43-53 and figures 3-5).

Regarding claim 4, 12-14 passman discloses repeating (registered) said attempting to affiliate if the wireless terminal does not contain one or more functioning backbone transceivers (column 4, lines 15-27).

Regarding claim 5, Passman discloses receiving beacon messages from different cluster heads, ignoring cluster heads with a signal strength less than a threshold, returning an unsuccessful affiliation result if all cluster heads are ignored in said ignoring, and ordering any cluster heads not ignored in said ignoring into a list according to a predetermined criterion (resigning and clustering with other head clusters (see figure 4 and column 5, lines 5-63).

Regarding claim 6, Passman discloses the attempting to affiliate further sending an affiliation request to a cluster head at a top of the list, sending an affiliation confirmation to the cluster head at the top of the list if a response to the affiliation request is received, and deleting the cluster head at the top of the list if no response to the affiliation request is received see figure 4 and column 5, lines 5-63).

Regarding claims 7- 8, Passman discloses the executing an affiliation check includes'. storing a number of beacon messages from the affiliated cluster head, ascertaining whether a set fraction of the beacon messages has a signal strength above a threshold value, and continuing to operate as a cluster member

if a set fraction of the beacon messages has a signal strength above the threshold value (column 9, line 1-coumn 10, line 55)

Regarding claims 9, 16, Passman discloses delaying for a random period before said determining (column 10, lines 1-31).

Regarding claims 17 and 27, Passman discloses a wireless network,(see figures 4-7)comprising: a plurality of first wireless terminals configured to operate as cluster heads by communicating with at least one other cluster head over one or more backbone links, each one of the plurality of first wireless terminals including one backbone transceivers, and at least one second wireless terminal configured to operate as a cluster member by communicating with an associated cluster head over one or more local links, each one of the at least one second wireless terminals including one or more cluster transceivers, wherein at least one of the first and second wireless terminals includes both a backbone transceiver and a cluster transceiver column 9, line 1-coumn 10, line 55 and figures 4-9).

Regarding claims 18 and 28, Passman discloses the backbone transceiver is configured to operate over first distances and in a first frequency range, and wherein the cluster transceiver is configured to operate over second distances that are shorter than the first distances and in a second frequency range that is different from the first frequency range (column 10, lines 32-68).

Regarding claim 20-23, at least one of the first wireless terminals includes two different types of backbone transceivers (see figures 4-9).

Claim 29, Passman teaches a method performed by a first terminal, the first terminal being a wireless, mobile terminal, (see figures 1-5) the method comprising:

Passman teaches receiving beacons from a plurality of second terminals, where at least one of the beacons is received according to a first wireless access protocol and at least one other one of the beacons is received according to a second wireless access protocol (column 8, lines 53-68)

Passman teaches determining a signal strength associated with each of the second terminals based on the beacons received according to the first and second wireless access protocols (column 8, lines 53-68 and column 9, lines 1-16).

Passman teaches sending an affiliation message to one of the second terminals based on the determined signal strength (see figure 5)

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Passman in view of Fischer (US patent No. 5,371,734).

Regarding claims 24-25, Passman does not teach discloses the one backbone transceivers includes one of the following:, a microwave transceiver, However, Fischer teaches TDMA transceiver (see abstract). It would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to utilize a microwave transceiver in particular time division multiplex access type of transceiver.

Allowable Subject Matter

3. Claims 19 and 30, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art Passman does not teach the a first radio operating in an ultrahigh frequency (UHF) range, and wherein the cluster transceiver includes a second radio operating at substantially 2.4 GHz.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882.

The Central FAX Number will change to 571-273-8300. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

Application/Control Number: 10/039,308

Page 11

Art Unit: 2684

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12/30/05
Tilahun Gesesse
TILAHUN GESESSE
PRIMARY EXAMINER